Health Care System in the United States

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Learning Objectives

1. Understand and be able to discuss the pertinent structures and functions carried out by the United States health care system
2. Describe the history of the United States health care delivery system and its component and how they came to exist and how the system through which they interact is different from that in other developed countries.
3. Understand and compare the theories of "market justice" and "social justice" in the allocation of health care resources in the United States.
4. Describe how "Chaos Theory" relates to the current system of health care delivery in the United States and what implication this relationship might have to future attempts to make sweeping political change in the system.
5. Identify the major trends in health care that will have significant impact on the way medicine is practiced and health care is delivered in the next 20-30 years.

Reference:

Delivering Health Care in America: A systems Approach – Chapter One, pp 3-30
Shi, L. and Singh, L.S.
Aspen Publishers, Inc. 1998

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Central Features of Health Care in America

1. There is no system for health care delivery in America. The various parts of the delivery are not necessarily linked. The fragmentation of the various parts has resulted in a multi-layered enterprise, which generally grew from the bottom up and has resulted in highly complex inter-relations between the recipients, the deliverers and the payers. The health care 'system' in America is a system in the same way that the former Yugoslavia is a 'country'; both are composed of fragmentary components that war with each other over resources.
2. Each of the individual parts of health care in America are currently facing enormous pressure for change in the dimensions of Cost (everyone wants to pay less for health care), Quality ("If we can put a man on the moon, why can't you cure the common cold?") and Access (everyone wants to see their choice of a physician in a manner much like they use in ordering food from MacDonald's – no waiting). Every segment of health care is facing the challenge of trying to meet these 'customer' expectations by making rational, timely and realistic improvements in the way they carry out their function; these changes are often carried out in full view of the public eye.
3. The mechanisms of health care delivery in America qualify as a Complex Adaptive System (CAS). In Complexity Theory a CAS is composed of inter-related processes (and groups of processes) that have some inter-dependence and share features such as culture, resources, space, etc. Examples of CASs are: a beehive, a flock of birds, the oil-based economy of the Middle East and the human GI tract. Generally a CAS has a boundary to separate CAS from non-CAS. Sometimes a boundary is blurry and indistinct. In medicine and health care the boundary is sometimes poorly defined (e.g., nutrition, alternative therapies, etc.) and occasionally merges and overlaps boundaries and contents of other CASs (e.g., business). But, in general, the CAS that is health care in America can be clearly recognized and is distinct from many others (i.e., it is not 'law').

The component parts of a CAS that are contained in health care include:

- *Culture* – the beliefs, economics and political forces that shaped the development of the current situation and which will mold the direction of changes in the future.
- *Resources* – particularly the people and the human resource in health care are distinct; the technology and the financing of the system occasionally blur into other CASs.
- *Processes* – generally the processes in health care represent a series of continuums and have an easily perceived relationship and inter-connectedness (e.g., from free-living to institutionalized; episodic care to continuous care; medical to surgical interventions; acute care to chronic care; outpatient settings to inpatient settings, etc.)

- *Outcomes* – specific outcomes relate clearly to the health or the functionality of the individual but there is also a shared "value" in these issues for the family, community, cohort or nation.
- *Trends* – whatever the particular process in health care there is consistent movement from *one state* toward another:
    i. *Illness* -> wellness
    ii. *Acute care* -> prevention
    iii. *Individual* -> community (population) health
    iv. *Fragmented care* -> managed care
    v. *Independent settings* -> integrated systems
    vi. *Catch-as-catch-can* -> organized continuum of services

Complexity Theory notes that, within each CAS, there are some processes and functions that are very regular and orderly; these processes are highly predictable, whatever they do they do it the same way every time and produce the identical product every time. At the other extreme within the CAS, there is complete disorder and chaos; processes here either fail to produce or function so erratically that their product is so highly variable as to be useless. Between these two extremes is the Zone of Complexity; here there is some disorder and variability but not chaos. Interestingly, the Theory postulates that it is in the Zone of Complexity that growth, maturation and improvement occur. There is no adaptability in the Zone of Order and no usefulness in the Zone of Chaos; only in the Zone of Complexity (on the edge of Chaos) is there any likelihood of change that can make an improvement in the process (efficiency) or the outcome (greater value, quality or functionality).

Application of Complexity Theory to health care in America will require that we understand the concepts, identify the processes that lie within the various Zones and focus our attention on the Zone of Complexity as the right place for improvement to occur. Changes are being made every day in the managed care market in an attempt to resolve the tension between cost and coverage; some products have failed, some are proving useful; these events are occurring on the edge of chaos.

Ten Basic Attributes of health care in America

1. There is no central, controlling agency

Other countries, with different cultures, beliefs and history have responded to the health care needs of their population by developing global budgets and placing overall responsibility and direction in the hands of a central, government agency (e.g., the Ministry of Health). This approach is marked by open access to health care for all citizens and reduction and control of profligate spending. In the United States, the funding of health care is about 50/50 between the government and private sources but delivery of health care is predominantly private (exceptions include the governmental delivery systems in DoD, VA and the Indian Health Service). State and federal governments oversee federal expenditures in health care by:

a) Setting expenditure budgets within their jurisdiction
b) Setting standards of participation for re-imbursement
c) Setting re-imbursement rates.

2. Access to health care does not depend on insurance

Approximately 45 million people (17% of the population) are uninsured. Many (not all) of these are unable or unwilling to pay for primary and preventive care so they use hospital emergency departments or free clinics whenever they develop serious or troublesome health problems. Thus, insurance allows for (but does not necessarily produce) coordinated, continuous care while the uninsured of the population get episodic, acute care.

3. American health care is an imperfect market

There are some characteristics of the American health care "system" that prevent it from operating as a completely free market system:

a) Buyers (patients) and sellers (providers) do not act independently
b) Competition is restrained by the existence of large health plans
c) Buyers do not have Price & Quality information on every seller
d) Buyers do not bear the burden of cost directly (leading to the 'moral hazard' of first-dollar insurance coverage)

4. Third party insertion creates artificial interests

"When two people get together to spend a third person's money, larceny will occur." (Old Chinese saying). Because of this concern, third party payers have inserted various means of cost control on health care spending through utilization review (pre-admission review, second opinions, pre-authorization for procedures, etc.).
Physicians recognize many of these activities as part of the "hassle factor" in trying to keep costs under control.
Cost concerns tend to drive the decisions about care since "quality can't be measured."

5. Multiple Payers exist in the "system"

The multiplicity of payers in the system creates an additional problem. Each payer has their own system of rules and paperwork (required in triplicate by a certain point in the care process). Physicians have needed to hire additional personnel to track and complete the necessary paperwork to assure that their charges are re-imbursed.

6. Multiple players exist in the "system"

The existence of many different entities in the involved process of preventing, diagnosing and treating illness does prevent any one of the entities (e.g., payers, providers, insurers, care-givers, individuals, groups, associations, etc.) from gaining an upper hand or undue influence and dominating the market. However, that same gridlock prevents anyone from making striking improvements in the "system".

7. Legal risks increase costs

The increasing willingness of the American public to litigate about anything has involved the medical profession just like the rest of the society. The result of several large awards to injured/wronged parties has had the obvious result of increasing premiums for obtaining insurance coverage, especially for the specialties that are most at-risk (e.g., orthopedics, neurosurgery, OB-Gyn, etc.). A less well-recognized effect on the cost of health care has been the practice of defensive medicine (wherein

most physicians order a few more – probably unnecessary – tests on *every* patient "just to be sure").

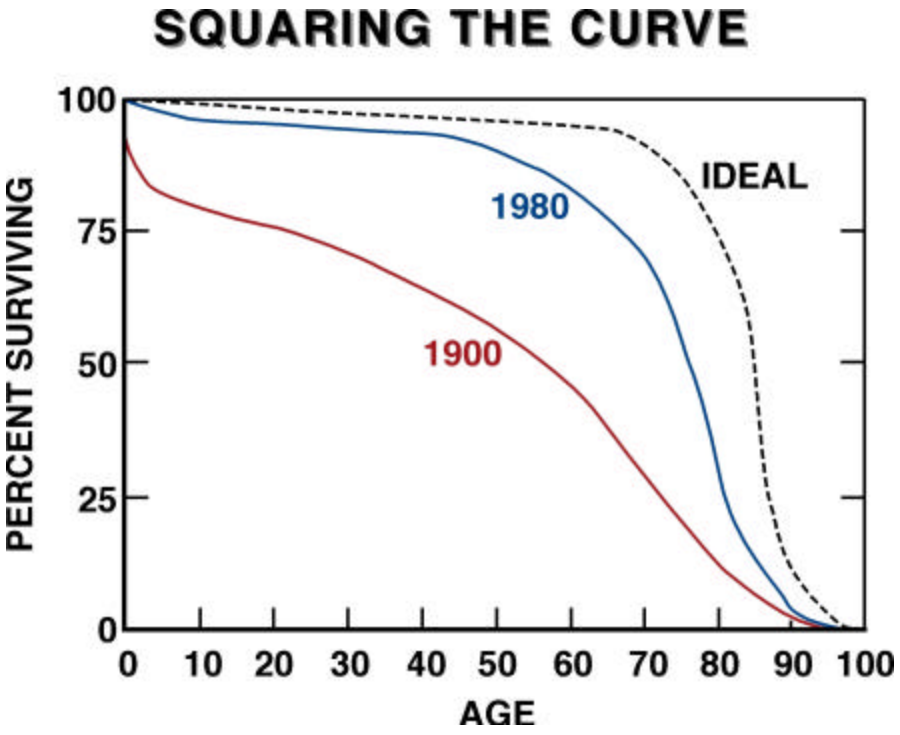
8. American leadership in technology raises costs

American leadership in technology (computers, space, etc.) has created a belief in the infallibility and necessity for high science in medicine. As a consequence, hospital and clinic managers are pressed to purchase and use the latest technology (PET scanners, lithotripter, stereotactic scanner, Warp drives and plasma manifolds, etc.). The cost of such items must be recouped through the use of the technology and charges sent to the payers. Managers and physicians are then under pressure to use the technology (from patients, physicians and manufacturers) and to not use it from insurers and other payers.

9. The continuum of care is lengthening

As shown in the graph below, the life span and median age for each birth-year cohort is increasing. This success by the medical profession (saving and lengthening life) has resulted in what is likely the single largest cause of health care cost increase (above inflation): more people needing more care. The elderly are sicker and have more medical needs than younger people.

This antenatal lengthening of the life span has implications both in breadth (more medicines needed for chronic illnesses, more home health and outpatient surgery being done) and deepening (emergence of the issues of assisted suicide, cloning for tissue transplantation, etc.)



(PS: Extra credit will be given for correct information about the *cause* of this improvement. What accounts for the remarkable difference between the 1900 cohort and the 1980 cohort?)

10. More attention to Quality

Increased attention that has been given to the issue of the quality of care in recent years has shifted the conversation. As compared to only a decade ago, in 2000 there is less discussion about ***whether*** health care quality can be measured and more on ***how*** it will be measured and ***who*** owns the information about those measurements.

How did this "system" evolve?

Pre-Industrial America was medically primitive compared to the center of medical knowledge in Europe (Vienna and Austria). There was not an easy mechanism for sharing knowledge to make discoveries quickly available to all. Several conditions prevailed in America at that time that characterized health care:

a) Physicians were not viewed as part of a profession; there was no standard of training or knowledge needed to be called a 'doctor' so it was seen as similar to a trade. Herbalists, homeopaths and midwives functioned in the same sphere of influence. Physicians were trained through apprenticeships with more established physicians (who were paid directly by the student and only when the student 'passed' a course of instruction). Pay and income was at the lower middle-class level.
b) Fee-for-service (FFS) was the method of payment. The delivery of health care was completely unorganized but was quite vital under capitalistic conditions.
c) Hospitals and Dispensaries arose (separately) in the 1880s as charitable organizations for the care of needy people. Hospitals were mostly a place to die. Dispensaries were eventually absorbed into the operation of hospitals as the outpatient services department.

Post-Industrial America was associated with changes in several aspects of the health care "system":

a) The medical profession enhanced its esteem and prestige by a series of steps that required more education, training and standards for its practitioners. The American Medical Association was established in 1847; in 1893, Johns Hopkins Medical School became a graduate program and required a college degree for admission. In 1910, the commissioned Flexner Report exposed the widely variant types of activities passing for medical education throughout the country and made strong recommendations for basing curricula in science and standardizing it across the country. Medical schools began to lengthen the formal classroom time and to base their curricula on the European model emphasizing anatomy, physiology, chemistry, etc. As a direct result of Flexner's Report, medical schools affiliated with hospitals and began to link the instruction of medical students with the care of the sick. Under the Medical Practices Acts of the 1870s, states were given the power and responsibility to license physicians; soon this was linked to the education of the physician.
b) Science and technology grew and interest in them was heightened by the events during and immediately after WWII. The National Institutes of Health were created and funded; medical knowledge and scientific under-pinnings grew at a logarithmic rate. Physicians came to be seen as professionals and as scientists. Salaries and income soared.
c) The first public health program was established in Massachusetts in 1850; by the 1880s there were Group Practice models and pre-paid health care plans in

existence in the West. The War Risk Insurance Act of 1914 extended to soldiers, sailors and airmen the same rights as civilian workers had if injured on the job: worker's compensation. With the rise of interest in these compensation laws came attempts to broaden that effort to provide total health insurance. (Germany had started a compulsory national health insurance program in 1883 and by 1912 it was commonplace throughout Europe).

In 1917, 1942 and 1946 attempts were made to provide a national health care program based on national insurance. These efforts failed because of anti-German sentiment, opposition by the AMA and ideological conflict with the concept of a centralized role for government in such a weighty matter. President Clinton tried in 1993 to "reform health care" (his proposal were all about reforming health care financing, not health care itself). That attempt also failed, mostly because of three fears:

- ✓ People's fear that the government would have too much power
- ✓ People's fear they would lose choice and access to control costs and
- ✓ People's fear that care would be rationed to control cost.

Current Status

Health care workforce makes up about 3% of the total national workforce but represents 15% of the gross domestic product. Most health care workers are employed by institutions (hospitals, nursing homes, personal care facilities, etc.)

Physicians in the United States number about 725,000 (MDs and DOs); most are specialty trained and only one-third deliver primary care. On average, an American physician works 53 hours a week, sees 112 patients a week and earns $190,000 a year (before taxes). That's $71.70 per hour. There are 1.9 million nurses.

There are 6580 hospitals, 16,700 nursing homes and 5000 mental health facilities in the country. Medical schools (125) and Osteopathic schools (17) train physicians in addition to the 54 Dental schools and about 1500 nursing programs throughout the country.

The country also has about 1,000 health insurance companies and 70 Blue Shield plans; there are 700 HMOs and over a 1000 PPOs.

The population and the elected officials continue to wrestle with which of two theories is the best method of allocating health care resources:

Social Justice Theory: equitable distribution of health care is a societal need

- ✓ Health care is a social good (not viewed in economic terms)
- ✓ Health care should be collectively financed (government function)
- ✓ Allocation should be based on need, not ability to pay
- ✓ Community well-being is a priority (not just the individual).

Market Justice Theory: distribution should occur along lines of market forces

- ✓ Health care is an economic good
- ✓ Supply and demand forces apply to health care as in any market
- ✓ Individual has responsibility to earn means to afford care (access is earned, not a guaranteed right).

Future (and Present) Issues

The status of the health care delivery system(s) in America is one of constant change and flux. The CAS seems to be marked by more uncertainty and chaos than by

order and reproducible and predictable outcome. Currently, several issues are rising in the public mind as paramount; resolution of these issues may not be any more clear than the resolution we have seen for previous major concerns. However, the next decade (and possibly longer) will be marked by the debate about these (and other) issues and there will be impact and change on the practice of medicine because of positions taken on these issues:

1. **Patients' Rights**
   The real issue is whether an individual should have the legal right to seek redress from a managed care entity if the outcome of decisions or treatment provided by that entity are not to the liking of the individual (patient).
2. **Electronic medical records and patient privacy.**
   The issue revolves around the question of security and the proper use of electronic information once the entire history, physical and laboratory values of every person are in electronic format and stored in an accessible form.
3. **Defined Contribution v. Defined Benefit insurance coverage.**
   Here the question involves how to create an equitable insurance package and whether the most important consideration is cost or coverage.
4. **Prescription Drug and Pharmacy price adjustments.**
   As a major part of the visible cost of medical care, prescription drug costs are drawing particular attention. Considerations include mechanisms to subsidize research and development, changing the patent protection time and offering coverage for medications to Medicare patients. The issue is whether the social justice or the market justice theory should hold sway.
5. **Bearing the cost of medical education under managed care.**
   Academic medical centers (including all medical school hospitals) are expected to compete with non-teaching hospitals on cost-of-care; the source of subsidy for medical education is, at present, unclear. Without resolution, many of the nation's medical schools may have to close.

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